

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Withdrawn) A method for communication in a communication system, the communication system having a first cell, the first cell having a first sector and a second sector, the method comprising:

transmitting signals at a first power level to the first sector during a first time slot; and
transmitting signals at a second power level to the second sector during the first time slot.

2. (Withdrawn) The method of claim 1, wherein the second power level is less than the first power level.

3. (Withdrawn) The method of claim 1, further comprising:
transmitting signals at the second power level to the first sector during a second time slot;
and
transmitting signals at the first power level to the second sector during the second time slot.

4. (Withdrawn) The method of claim 3, further comprising:
transmitting a reverse power control signal to the first sector at the first power level during the second time slot.

5. (Withdrawn) A method for communication in a communication system, the communication system having a first cell, the first cell having a first sector and a second sector, the method comprising:

determining a time-division power assignment for the first sector and the second sector;
and
generating signals to the first sector and the second sector according to the power assignment.

6. (Withdrawn) The method of claim 5, wherein the cellular communication system is a Code Division Multiple Access (CDMA) system.

7. (Withdrawn) The method of claim 6, further comprising:
adjusting reverse power control signals according to the power assignment.

8. (Withdrawn) The method of claim 6, further comprising:
adjusting a pilot signal according to the power assignment.

9. (Currently Amended) A mobile unit, comprising:
an antenna; and
an equalizer coupled to the antenna, the equalizer comprising:

 a plurality of taps, each having first and second associated coefficients, the first associated coefficient corresponding to a first plurality of time ~~slots~~, slot occurrences, the second associated coefficient corresponding to a second plurality of time ~~slots~~, slot occurrences, time ~~slots~~ slot occurrences of the second plurality of time ~~slots~~ slot occurrences alternating with time ~~slots~~ slot occurrences of the first plurality of time ~~slots~~, slot occurrences, the plurality of taps being operative to scale a first set of input symbols during the first plurality of time ~~slots~~ slot occurrences by the first associated coefficients, the plurality of taps being further operative to scale a second set of input symbols during the second plurality of time ~~slots~~ slot occurrences by the second associated coefficients, the plurality of taps being further operative to generate tap outputs and being equal to a total number of symbols per sample set;

 a summing node coupled to the plurality of taps, the summing node being operative to sum the tap outputs; and

 a memory storage unit adapted to store coefficient adjustment information, wherein the associated coefficients are adjusted according to the coefficient adjustment information.

10. (Currently Amended) The mobile unit of claim 9, wherein the summing node is further operative to generate a carrier-to-interference ratio C/I estimate for each time slot occurrence of the first and second pluralities of time ~~slots~~; slot occurrences.

11. (Currently Amended) The mobile unit of claim 10, further comprising:
a decision node operative to generate a data rate decision for said each time slot based on the ~~C/I~~ carrier-to-interference ratio estimate generated for said each time slot occurrence.

12. (Currently Amended) The mobile unit of claim 11, wherein the decision node comprises a look-up table correlating carrier-to-interference ratio C/I estimates and data rates.

13. (Currently Amended) An equalizer, comprising:
a plurality of taps being equal to a total number of symbols per sample set, the taps being operative to scale input symbols with a first set of associated coefficients during a first plurality of time ~~slots~~ slot occurrences and with a second set of associated coefficients during a second plurality of time ~~slots~~; slot occurrences, time ~~slots~~ slot occurrences of the second plurality of time ~~slots~~ slot occurrences alternating with time ~~slots~~ slot occurrences of the first plurality of time ~~slots~~; slot occurrences;

a coefficient adjustment node coupled to the plurality of taps, the coefficient adjustment node being operative to apply the first set of associated coefficients during the first plurality of time ~~slots~~ slot occurrences and to apply the second set of associated coefficients during the second plurality of time ~~slots~~; slot occurrences; and

a memory storage unit adapted to store coefficient adjustment information, wherein the associated coefficients are adjusted according to the coefficient adjustment information.

14. (Original) The equalizer of claim 13, wherein the equalizer is an adaptive equalizer.

15. (Currently Amended) An adaptive equalizer, comprising:

a plurality of taps being equal to a total number of symbols per sample set, the taps being operative to scale input symbols with a first set of associated coefficients during a first time slot and with a second set of associated coefficients during a second time slot;

a coefficient adjustment node coupled to the plurality of taps, the coefficient adjustment node being operative to apply the first set of associated coefficients during the first time slot and to apply the second set of associated coefficients during the second time slot; and

a memory storage unit adapted to store coefficient adjustment information, wherein the associated coefficients are adjusted according to the coefficient adjustment information;

wherein the equalizer is operative to generate a ~~CA~~ carrier-to-interference ratio estimate, the equalizer having $(2L+1)$ coefficients “C,” the ~~CA~~ carrier-to-interference ratio estimate for a time slot “i” being given as:

$$y_i(n) = \sum_{\ell=-L}^L C_{i,\ell}(n) \cdot x_i(n - \ell T)$$

wherein “n” is a sample set index, each sample set comprising a plurality of input symbols, wherein “x” is an input symbol within a sample set, and wherein “T” is the period of the input symbol, x.

16. (Currently Amended) The equalizer of claim 15, further comprising:

a data rate decision node operative to receive the ~~CA~~ carrier-to-interference ratio estimate and determine a corresponding data rate.

17. (Currently Amended) A mobile unit, comprising:

an equalizer adapted to calculate a first ~~CA~~ carrier-to-interference ratio estimate for a first transmitted signal power and a second ~~CA~~ carrier-to-interference ratio estimate for a second transmitted signal power; and

a data rate decision node operative to receive ~~CA~~ carrier-to-interference ratio estimates from the equalizer and generate a first data rate decision for the first ~~CA~~ carrier-to-interference ratio estimate and a second data rate decision for the second ~~CA~~ carrier-to-interference ratio estimate.

18. (Original) The mobile unit as in claim 17, wherein the first transmitted signal power is received during a first time slot, and the second transmitted signal power during a second time slot.

19. (Currently Amended) The equalizer of claim 13, wherein the equalizer is configured to generate first ~~CA~~ carrier-to-interference ratio estimates for the first plurality of time ~~slots~~ slot occurrences and second ~~CA~~ carrier-to-interference ratio estimates for the second plurality of time ~~slots~~ slot occurrences.

20. (Currently Amended) The equalizer of claim 19, wherein at least some current first ~~CA~~ carrier-to-interference ratio estimates include historical information from previous time slots of the first plurality of time ~~slots~~ slot occurrences, and at least some current second ~~CA~~ carrier-to-interference ratio estimates include historical information from previous time ~~slots~~ slot occurrences of the second plurality of time ~~slots~~ slot occurrences, whereby equalization process for each time slot occurrence is continuous, proceeding from where the process ended during the previous corresponding time slot occurrence.

21. (New) A mobile unit, comprising:

an antenna; and

an equalizer coupled to the antenna, the equalizer comprising:

a plurality of taps,

a summing node coupled to the plurality of taps, the summing node being operative to sum the tap outputs, and

a memory storage unit,

wherein each tap of the plurality of taps has associated coefficient values, the equalizer being configured to perform equalization process continuously for each time slot of at least two time slots, each time slot of the at least two time slots corresponding to a plurality of occurrences, coefficient values of said each time slot being stored at end of each occurrence of said each time slot and retrieved during the next occurrence of said each time slot, the plurality of taps being operative to scale a different set of input

symbols during said each time slot by the coefficient values corresponding to said each time slot, the plurality of taps being further operative to generate tap outputs and being equal to a total number of symbols per sample set, the memory storage unit being adapted to store coefficient adjustment information, wherein the associated coefficient values are adjusted according to the coefficient adjustment information.

22. (New) An equalizer, comprising:

a plurality of taps;

a summing node coupled to the plurality of taps, the summing node being operative to sum the tap outputs; and

a memory storage unit;

wherein each tap of the plurality of taps has associated coefficient values, the equalizer being configured to perform equalization process continuously for each time slot of at least two time slots, each time slot of the at least two time slots corresponding to a plurality of occurrences, occurrences of a first time slot of the at least two time slots alternating with occurrences of a second time slot of the at least two time slots, coefficient values of said each time slot being stored at end of each occurrence of said each time slot and retrieved during the next occurrence of said each time slot, the plurality of taps being operative to scale a different set of input symbols during said each time slot by the coefficient values corresponding to said each time slot, the plurality of taps being further operative to generate tap outputs and being equal to a total number of symbols per sample set, the memory storage unit being adapted to store coefficient adjustment information, wherein the associated coefficient values are adjusted according to the coefficient adjustment information.